

CANCER IMMUNOLOGY RESEARCH

TABLE OF CONTENTS

WHAT WE'RE READING

- 983** **A Sampling of Highlights from the Literature**

CANCER IMMUNOLOGY MINIATURES

- 984** **In Human Visualization of Ibrutinib-Induced CLL Compartment Shift**
Marius E. Mayerhoefer, Alexander Haug, Ulrich Jäger, Verena Pichler, Sarah Pfaff, Hans-Jürgen Wester, Marcus Hacker, Lukas Kazianka, and Philipp B. Staber
Ibrutinib is used to treat CLL. Labeling and imaging 9 patients with CLL show that in response to ibrutinib treatment, CXCR4⁺ CLL cells shift from lymph nodes and bone marrow to peripheral blood and the splenic cavernous system.

RESEARCH ARTICLES

- 990** **Distinctive Subpopulations of Stromal Cells Are Present in Human Lymph Nodes Infiltrated with Melanoma**
Jennifer Eom, Saem Mul Park, Vaughan Feisst, Chun-Jen J. Chen, Joanna E. Mathy, Julie D. McIntosh, Catherine E. Angel, Adam Bartlett, Richard Martin, Jon A. Mathy, Jonathan S. Cebon, Michael A. Black, Anna E.S. Brooks, and P. Rod Dunbar
Metastases in lymph nodes correlate to poor patient prognoses, with stromal cells in these lymph nodes contributing to tumor progression. In melanoma-invaded lymph nodes, two distinct subsets of stromal cells are identified and characterized.
- 1004** **The Mincle/Syk/NF- κ B Signaling Circuit Is Essential for Maintaining the Protumoral Activities of Tumor-Associated Macrophages**
AC Chunjie Li, Vivian Weiwen Xue, Qing-Ming Wang, Guang-Yu Lian, Xiao-Ru Huang, Tin-Lap Lee, Ka-Fai To, Patrick Ming-Kuen Tang, and Hui-Yao Lan
Macrophages in tumors can promote or hinder cancer progression. The expression of the pattern-recognition receptor Mincle on tumor-associated macrophages (TAMs) leads to the activation of the Syk/NF- κ B pathway and subsequent establishment of protumoral TAMs.
- 1018** **Identification of the Cryptic HLA-I Immunopeptidome**
Florian Erhard, Lars Dölken, Bastian Schilling, and Andreas Schlosser
A computational approach shows cryptic peptides as an abundant class of epitopes in different tumor samples. This approach can potentially be used to elucidate complete HLA-I immunopeptidomes and aid in the discovery of targets for cancer immunotherapy.
- 1027** **Inflammation-Induced Abnormal Expression of Self-molecules on Epithelial Cells: Targets for Tumor Immunoprevention**
Camille Jacqueline, Amanda Lee, Nolan Frey, Jonathan S. Minden, and Olivera J. Finn
Exposure of normal epithelial cells to proinflammatory cytokines leads to expression of disease-associated antigens that are later expressed on tumor cells as tumor-associated antigens. Data suggest that immune memory against them may strengthen tumor immunosurveillance.
- 1039** **Immunotargeting of the xCT Cystine/Glutamate Antiporter Potentiates the Efficacy of HER2-Targeted Immunotherapies in Breast Cancer**
Laura Conti, Elisabetta Bolli, Antonino Di Lorenzo, Valentina Franceschi, Francesca Macchi, Federica Riccardo, Roberto Ruiu, Luca Russo, Elena Quaglino, Gaetano Donofrio, and Federica Cavallo
Despite the efficacy of anti-HER2 in HER2⁺ breast cancer patients, many patients develop recurrent disease. Targeting cancer stem cells with xCT vaccination improves the efficacy of anti-HER2 by improving antibody-dependent cell-mediated cytotoxicity and T-cell responses.
- 1054** **Radiotherapy Cooperates with IL15 to Induce Antitumor Immune Responses**
Karsten A. Pilones, Maud Charpentier, Elena Garcia-Martinez, Camille Daviaud, Jeffrey Kraynak, Joseph Aryankalayil, Silvia C. Formenti, and Sandra Demaria
IL15 can promote and sustain antitumor responses and is being tested in the clinic. Here, combination IL15 and tumor-targeted radiotherapy is shown to have enhancing effects on immune cells, which results in the induction of durable antitumor responses.

TABLE OF CONTENTS

1064 The Expression of Adenosine A2B Receptor on Antigen-Presenting Cells Suppresses CD8⁺ T-cell Responses and Promotes Tumor Growth

Siqi Chen, Imran Akdemir, Jie Fan, Joel Linden, Bin Zhang, and Caglar Cekic

Adenosine has pleiotropic effects in the tumor microenvironment. Adenosine A2B receptor expression on immunosuppressive antigen-presenting cells promotes tumor growth by inhibiting antitumor T cells. Blocking A2B receptor in combination with adoptive cell therapy induces profound antitumor effects.

1075 Mammalian SWI/SNF Complex Genomic Alterations and Immune Checkpoint Blockade in Solid Tumors

Sarah Abou Alaiwi, Amin H. Nassar, Wanling Xie, Ziad Bakouny, Jacob E. Berchuck, David A. Braun, Sylvan C. Baca, Pier Vitale Nuzzo, Ronan Flippot, Tarek H. Mouhieddine, Liam F. Spurr, Yvonne Y. Li, Taiwen Li, Abdallah Flaifel, John A. Steinharter, Claire A. Margolis, Natalie I. Vokes, Heng Du, Sachet A. Shukla, Andrew D. Cherniack, Guru Sonpavde, Robert I. Haddad, Mark M. Awad, Marios Giannakis, F. Stephen Hodi, X. Shirley Liu, Sabina Signoretti, Cigall Kadoch, Matthew L. Freedman, David J. Kwiatkowski, Eliezer M. Van Allen, and Toni K. Choueiri

Mammalian SWI/SNF complex mutations are evaluated in immune checkpoint inhibitor (ICI)-treated patients with multiple solid tumor types. No association with clinical outcome is found, providing evidence that these mutations should not be used as biomarkers of ICI response.

1085 ASC Modulates CTL Cytotoxicity and Transplant Outcome Independent of the Inflammasome

Melody Cheong, Kate H. Gartlan, Jason S. Lee, Siok-Keen Tey, Ping Zhang, Rachel D. Kuns, Christopher E. Andoniou, Jose Paulo Martins, Karshing Chang, Vivien R. Sutton, Greg Kelly, Antiopi Varelias, Slavica Vuckovic, Kate A. Markey, Glen M. Boyle, Mark J. Smyth, Christian R. Engwerda, Kelli P.A. MacDonald, Joseph A. Trapani, Mariapia A. Degli-Esposti, Motoko Koyama, and Geoffrey R. Hill

The adaptor protein ASC is a key component of the inflammasome complex. ASC-deficient CD8⁺ T cells have impaired capacity to induce graft-versus-host disease and graft rejection and can control leukemia burden over time.

1099 Paclitaxel Induces Immunogenic Cell Death in Ovarian Cancer via TLR4/IKK2/SNARE-Dependent Exocytosis

Tat San Lau, Loucia Kit Ying Chan, Gene Chi Wai Man, Chi Hang Wong, Jacqueline Ho Sze Lee, So Fan Yim, Tak Hong Cheung, Iain A. McNeish, and Joseph Kwong

The standard of care for ovarian cancer has remained unchanged for almost 30 years, thus understanding the therapeutic mechanism of action might improve future therapeutic options. Paclitaxel induces immunogenic cell death via TLR4, leading to antitumor immunity.

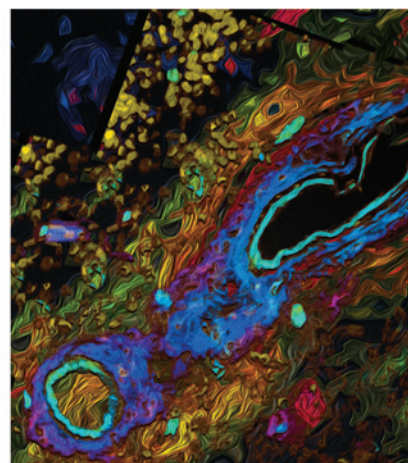
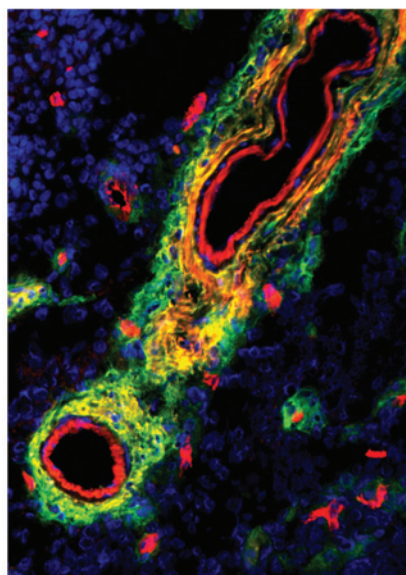
AC icon indicates AuthorChoice

For more information please visit www.aacrjournals.org

ABOUT THE COVER

Lymph node composition and structure contribute to the induction of antitumor T-cell responses. A better understanding of how melanoma metastasizing to the lymph node can alter stromal cell phenotype and function and, thus, suppressing antitumor immune responses may improve treatment. Here, the Dunbar laboratory and colleagues define two distinct subsets of stromal cells in metastatic lymph nodes: one is similar to fibroblastic reticular cells and may inhibit T cells, and another supports extracellular matrix production. Molecular profiles of these populations differ from those of stromal cell populations in normal lymph nodes. The phenotypic markers that define the two stromal subsets within tumor-infiltrated lymph nodes could aid in producing new therapeutic strategies to enhance antitumor immunity. To read more, Eom and Park et al. begins on page 990. Immunofluorescence staining from the Dunbar laboratory. Artwork by Lewis Long.

3F CD34 CD271 DAPI



Cancer Immunology Research

8 (8)

Cancer Immunol Res 2020;8:983-1111.

Updated version Access the most recent version of this article at:
<http://cancerimmunolres.aacrjournals.org/content/8/8>

E-mail alerts [Sign up to receive free email-alerts](#) related to this article or journal.

Reprints and Subscriptions To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at pubs@aacr.org.

Permissions To request permission to re-use all or part of this article, use this link <http://cancerimmunolres.aacrjournals.org/content/8/8>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.